SEQUENCE LISTING

```
<110> John S. Babcook
      Jaspal S. Kang
      Orit Foord
      Larry Green
      Xiao Feng
      Scott Klakamp
      Mary Haak-Frendscho
      Palaniswami Rathanaswami
      Craig Pigott
      Meina Liang
      Rozanne Lee
      Kathy Manchulencho
      Raffaella Faggioni
      Giorgio Senaldi
      Qiaojuan Jane Su
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   FACTOR AND USES THEREOF
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Cys Ala Arg Asp Ser Asn Gln Tyr Asn Trp Asn Asp Glu Val Tyr Asp
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aggttcageg geagtggate tgggaeagaa tteaetetea eaateageag eetgeageet 240
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg Glu Glu Gln Leu Val Arg Gly Gly Tyr Tyr Tyr Gly Met
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Pro Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                                25
Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
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        35
                            40
Trp Ile Gly Asn Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
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                        55
Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
                                         75
65
                    70
Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
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                85
                                    90
Cys Ala Arg Asp Ser Asn Gln Tyr Asn Trp Asn Asp Glu Val Tyr Asp
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Tyr Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
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        35
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                    70
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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Phe Pro Trp
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Tyr Trp Ser Trp Ile Arg Gln Pro Ala Gly Lys Gly Leu Glu Trp Ile
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Gly Arg Ile Tyr Pro Thr Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
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50
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Ser Arg Val Thr Met Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
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                    70
Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
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Gly Gly Trp Ser Tyr Trp Tyr Phe Asp Leu Trp Gly Arg Gly Thr Leu
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Val Thr Val Ser Ser
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Asp Gly Ser Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
                             40
                                                 45
Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Trp Asp Ser Gly Val Pro
                         55
                                             60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
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Ser His Trp Pro Arg Glu Phe Thr Phe Gly Gly Gly Thr Lys Val Glu
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gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgcat 240
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Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu His
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Ile Ala Val Ala Gly Gly Tyr Tyr Gly Leu Asp Val
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Val Ser Ser Leu Gln Pro
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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His His Ser Tyr Pro Leu
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Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
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Trp Ile Gly Asn Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Thr Pro Ser
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Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
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Cys Ala Arg Asp Ser Asn Gln Tyr Asn Trp Asn Asp Glu Val Tyr Asp
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                                                 45
                            40
Trp Ile Gly Asn Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
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Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
                    70
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Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
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Cys Ala Arg Asp Ser Asn Gln Tyr Asn Trp Asn Asp Glu Val Tyr Asp
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Tyr Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<213> Homo sapiens

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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagagatcag 300
gataactgga actactacta cggtatggac gtctggggcc aagggaccac ggtcaccgtc 360
tcctca
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<210> 34
<211> 122
<212> PRT
<213> Homo sapiens
<400> 34
Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
    50
                                             60
                        55
```

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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                                                             80
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                     90
Ala Arg Asp Gln Asp Asn Trp Asn Tyr Tyr Tyr Gly Met Asp Val Trp
                                 105
                                                     110
Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
<210> 35
<211> 333
<212> DNA
<213> Homo sapiens
<400> 35
gatattgtga tgactcagtc tccactctcc ctgcccgtca cccctggaga gccggcctcc 60
ateteetgea ggtetagtea gageeteett eatagtaatg gatacaacta tttggattgg 120
tacctgcaga agccagggca gtctccacag ctcctgatct ttttgggttc ttatcgggcc 180
tccggggtcc ctgacaggtt cagtggcagt ggatcaggca cagattttac actgaaaatc 240
agcagagtgg aggctgagga tgttggggtt tattactgca tgcaagctct acaaacttgg 300
acgttcggcc aagggaccaa ggtggaaatc aaa
<210> 36
<211> 111
<212> PRT
<213> Homo sapiens
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Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1
                                    10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35
                            40
Pro Gln Leu Leu Ile Phe Leu Gly Ser Tyr Arg Ala Ser Gly Val Pro
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65
                    70
                                         75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
Leu Gln Thr Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100
                                 105
                                                     110
<210> 37
<211> 372
<212> DNA
<213> Homo sapiens
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teetgtgeag egtetggatt eacetteagt aactatgaea tgeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtat taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt atttctgtgc gagagagaca 300
gctatcctta ggggctacta ctactacgat atggacgtct ggggccaagg gaccacggtc 360
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accgtctcct ca

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<210> 38
<211> 124
<212> PRT
<213> Homo sapiens
<400> 38
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
                         55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
Ala Arg Glu Thr Ala Ile Leu Arg Gly Tyr Tyr Tyr Tyr Asp Met Asp
                                 105
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
<210> 39
<211> 321
<212> DNA
<213> Homo sapiens
<400> 39
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atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagece ctaagegeet gatetetget geateeagtt tgeaaggtgg ggteeeatea 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acceteteac tttcggegga 300
gggaccaagg tggagatcaa a
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<210> 40
<211> 107
<212> PRT
<213> Homo sapiens
<400> 40
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35
Ser Ala Ala Ser Ser Leu Gln Gly Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                    70
                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
                                     90
                                                         95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100
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<210> 41
<211> 372
<212> DNA
<213> Homo sapiens
<400> 41
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tcctgtgcag cctctggatt caccttcagt agctatgaca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtat taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaagtga acagcctgag agctgaggac acggctgtgt attactgtgc gagagaggtc 300
cgtagtggga gctactacta ttactacagt atggacgtct ggggccaagg gaccacggtc 360
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accgtctcct ca
<210> 42
<211> 124
<212> PRT
<213> Homo sapiens
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20
                                25
Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Ser Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
Leu Gln Val Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
Ala Arg Glu Val Arg Ser Gly Ser Tyr Tyr Tyr Tyr Tyr Ser Met Asp
                                105
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
<210> 43
<211> 321
<212> DNA
<213> Homo sapiens
<400> 43
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atcacttgcc gggcaagtca ggacatcaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcgtccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggccagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacaa cataatagtt atccgctcac tttcggcgga 300
                                                                    321
gggaccaagg tggagatcaa a
<210> 44
<211> 107
<212> PRT
<213> Homo sapiens
<400> 44
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                     10
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Arg Asn Asp
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                           40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Pro Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65
                                       75
                   70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
                                   90
               85
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
           100
                               105
<210> 45
<211> 345
<212> DNA
<213> Homo sapiens
<400> 45
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teetgtgeag eetetgggtt eacegteagt ageaactaea tgagetgggt eegeeagget 120
ccagggaagg ggctggaatg ggtctcagtt atttatagcg gtgataggac atactacgca 180
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
ggatttgact actggggcca gggaaccctg gtcaccgtct cctca
<210> 46
<211> 115
<212> PRT
<213> Homo sapiens
<400> 46
Glu Val Gln Leu Val Glu Ser Gly Gly Leu Ile Gln Pro Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Asp Arg Thr Tyr Tyr Ala Asp Ser Val Lys
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
65
                                       75
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
Arg Gly Glu Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
                               105
Val Ser Ser
        115
<210> 47
<211> 318
<212> DNA
<213> Homo sapiens
<400> 47
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttacc agcaacttag cctggtacca gcagaaacct 120
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ggccaggete ccagacteet catecatggt gcatecatta gggccaetgg teteccagee 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagtag cctgcagtct 240
gaagattttg cagtctatta ctgtcagcag tataattatt ggtggacgtt cggccaaggg 300
accaaggtgg aaatcaaa
<210> 48
<211> 106
<212> PRT
<213> Homo sapiens
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Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1
                5
                                   10
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Ser Asn
                               25
           20
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
                                               45
                           40
His Gly Ala Ser Ile Arg Ala Thr Gly Leu Pro Ala Arg Phe Ser Gly
                       55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
                                       75
65
                   70
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Tyr Trp Trp Thr
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               85
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
           100
<210> 49
<211> 345
<212> DNA
<213> Homo sapiens
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teetgtgeag cetetgggtt eacegteagt aggaactaea tgagetgggt eegeeagget 120
ccagggaagg ggctggaatg ggtctcagtt atttatagcg gtgataggac atactacgca 180
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
345
ggatttgact actggggcca gggaaccctg gtcaccgtct cctca
<210> 50
<211> 115
<212> PRT
<213> Homo sapiens
<400> 50
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Arg Asn
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Asp Arg Thr Tyr Tyr Ala Asp Ser Val Lys
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                                       75
                                                           80
65
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                   90
Arg Gly Glu Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
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105
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           100
Val Ser Ser
       115
<210> 51
<211> 318
<212> DNA
<213> Homo sapiens
<400> 51
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ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcagaaacct 120
ggccaggctc ccagactcct catccatggt gcatccatta gggccactgg tctcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagtag cctccagtct 240
gaagattttg cagtctatta ctgtcagcag tataattatt ggtggacgtt cggccaaggg 300
accaaggtgg aaatcaaa
<210> 52
<211> 106
<212> PRT
<213> Homo sapiens
<400> 52
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1
                                   10
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
           20
                               25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
       35
                           40
His Gly Ala Ser Ile Arg Ala Thr Gly Leu Pro Ala Arg Phe Ser Gly
                       55
                                           60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
                                       75
                   70
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Tyr Trp Trp Thr
               85
                                   90
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
           100
<210> 53
<211> 345
<212> DNA
<213> Homo sapiens
<400> 53
gaggtgcagc tggtggagtc tggaggaggc ttgatccagc ctggggggtc cctgagactc 60
teetgtgeag cetetgagtt caeegteagt aggaactaca tgagetgggt eegeeagget 120
ccagggaagg gactggaatg ggtctcagtt atttatagcg gtgataggac atactacgca 180
gacteegtga agggeegatt caccatetee agagacaatt eeaagaacae getgtatett 240
ggatttgact actggggcca gggaaccctg gtcaccgtct cctca
<210> 54
<211> 115
<212> PRT
<213> Homo sapiens
<400> 54
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu Phe Thr Val Ser Arg Asn
            20
                                25
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ser Val Ile Tyr Ser Gly Asp Arg Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                    70
                                        75
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                                         95
                                    90
Arg Gly Glu Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
                                105
                                                     110
Val Ser Ser
        115
<210> 55
<211> 318
<212> DNA
<213> Homo sapiens
<400> 55
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ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcagaaacct 120
ggccaggete ceagacteet catecatggt geatecatta gggccaetgg teteceagee 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagtag cctgcagtct 240
gaagattttg cagtctatta ctgtcagcag tataattatt ggtggacgtt cggccaaggg 300
accaaggtgg aaatcaaa
<210> 56
<211> 106
<212> PRT
<213> Homo sapiens
<400> 56
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1
                                     10
                 5
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
                                 25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
                            40
His Gly Ala Ser Ile Arg Ala Thr Gly Leu Pro Ala Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
                                         75
                    70
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Tyr Trp Trp Thr
                8.5
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 57
<211> 375
<212> DNA
<213> Homo sapiens
<400> 57
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caggtgcaac tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
teetgtgeag egtetggatt eacegteagt agetatggea tgeactgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtcta atggaagtaa taagtactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagataac 300
ggtgtctacg tgggatacgc ctactattac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctca
<210> 58
<211> 125
<212> PRT
<213> Homo sapiens
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr
            20
                                                     30
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35
                                                 45
                            40
Ala Val Ile Trp Ser Asn Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
Ala Arg Asp Asn Gly Val Tyr Val Gly Tyr Ala Tyr Tyr Tyr Gly Met
                                105
            100
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
                            120
<210> 59
<211> 321
<212> DNA
<213> Homo sapiens
<400> 59
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atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acceteggae gtteggeeaa 300
gggaccaagg tggaaatcaa a
<210> 60
<211> 107
<212> PRT
<213> Homo sapiens
<400> 60
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                 25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                             40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                         55
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                    70
                                        75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Arg
                                    90
                85
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100
<210> 61
<211> 375
<212> DNA
<213> Homo sapiens
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tectgtgeag egtetggatt eacegteagt agetatggea tgeactgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtcta atggaagtaa taagtactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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ggtgtctacg tgggatacgc ctactattac ggtatggacg tctggggcca agggaccacg 360
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gtcaccgtct cctca
<210> 62
<211> 125
<212> PRT
<213> Homo sapiens
<400> 62
Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg
                                     10
 1
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr
            20
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                            40
Ala Val Ile Trp Ser Asn Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
Ala Arg Asp Asn Gly Val Tyr Val Gly Tyr Ala Tyr Tyr Gly Met
                                105
                                                     110
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
                            120
<210> 63
<211> 321
<212> DNA
<213> Homo sapiens
<400> 63
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atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcaaaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcacagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacaa cataatagtt acccgtggac gttcggccaa 300
                                                                   321
gggaccaagg tggaaatcaa a
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<210> 64
<211> 107
<212> PRT
<213> Homo sapiens
<400> 64
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                             40
Tyr Ala Ala Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                    70
                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                    90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 65
<211> 384
<212> DNA
<213> Homo sapiens
<400> 65
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teetgtgeag egtetggatt eacetteagt aactatggea taeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtctg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagagctc 300
ccgaatagtg ggagctactc cggttactac tactactacg gtatggacgt ctggggccaa 360
gggaccacgg tcaccgtctc ctca
<210> 66
<211> 128
<212> PRT
<213> Homo sapiens
<400> 66
Gln Val Gln Leu Val Glu Ser Gly Gly Ser Val Val Gln Pro Gly Arg
1
                                     10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
            20
                                 25
Gly Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                             4Ω
Ala Val Ile Trp Ser Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
Ala Arg Glu Leu Pro Asn Ser Gly Ser Tyr Ser Gly Tyr Tyr Tyr Tyr
                                 105
                                                     110
            100
Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
                                                 125
        115
                             120
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<210> 67
<211> 321
<212> DNA
<213> Homo sapiens
<400> 67
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cattgttgtt accetctcac tttcggcgga 300
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            20
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
Glu Asp Phe Ala Thr Tyr Cys Leu Gln His Cys Cys Tyr Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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ccaggcaagg ggctggagtg ggtggcagtt atatggtctg atggaagtat taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagaagtg 300
gaatcagcta tgggagggtt ctactacaac ggtatggacg tctggggcca aggggccacg 360
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<212> PRT
<213> Homo sapiens
<400> 70
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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25
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Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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                            40
Ala Val Ile Trp Ser Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Val Glu Ser Ala Met Gly Gly Phe Tyr Tyr Asn Gly Met
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Asp Val Trp Gly Gln Gly Ala Thr Val Thr Val Ser Ser
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aggttcagcg gcagtggatc ggggacagaa ttcattttca caatcagcag cctgcagcct 240
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<210> 72
<211> 107
<212> PRT
<213> Homo sapiens
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                             40
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Ile Phe Thr Ile Ser Ser Leu Gln Pro
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<212> DNA
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ccaggcaagg ggctggagtg ggtggcagtt atatggtctg atggaagtat taaatactat 180
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ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagaagtg 300
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gtcaccgtct cctca
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<213> Homo sapiens
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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                            40
Ala Val Ile Trp Ser Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Val Glu Ser Ala Met Gly Gly Phe Tyr Tyr Asn Gly Met
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ccaggcaagg ggctggagtg ggtggcagtt atatggtctg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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<213> Homo sapiens
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Asp Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35
                             40
Ala Val Ile Trp Ser Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
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                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                                                              80
                    70
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Lys Met Ala Thr Ile Lys Gly Tyr Tyr Tyr Gly Met
                                105
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            100
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<212> DNA
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tggaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggccagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt accegctcac tttcggcgga 300
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<212> PRT
<213> Homo sapiens
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                                                 45
        35
                            40
Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Pro Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                         75
65
                    70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
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                85
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Gln
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<213> Oryctolagus cuniculus
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gggaaggggc tggagtggat cggaatcatt attagtagtg gtaccacata ctacgcgagc 180
tgggtaaaag gccgattcac catctccaaa acctcgacca cggtggatct gaaaatcacc 240
cgtccgacaa ccgaggacac ggccacatat ttctgtgcca gaggctggta cgagtttaac 300
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<212> PRT

<213> Oryctolagus cuniculus

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Met Gly Trp Phe Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly
        35
                            40
Ile Ile Ile Ser Ser Gly Thr Thr Tyr Tyr Ala Ser Trp Val Lys Gly
                        55
Arg Phe Thr Ile Ser Lys Thr Ser Thr Thr Val Asp Leu Lys Ile Thr
65
                    70
                                        75
Arg Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala Arg Gly Trp
                                    90
                85
Tyr Glu Phe Asn Leu Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser
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            100
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<212> DNA
<213> Oryctolagus cuniculus
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atcaagtgcc aggccagtga gaacattgat atcttattgg cctggtatca gcagaaagta 120
gggcagcctc ccaagctcct gatctatagg gcatccaaac tggcctctgg ggccccatcg 180
eggtteageg geagtggate tgggaeagag tteactetea ceateagega eetggagtgt 240
ggcgatgctg ccacttacta ctgtcaaagc aatgttggta gtactgctag aagtagttat 300
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ggtaatgctt tcggcggagg gaccgaggtg gtggtcaaa
<210> 82
<211> 113
<212> PRT
<213> Oryctolagus cuniculus
<400> 82
Asp Val Val Met Thr Gln Thr Pro Ala Ser Val Glu Ala Ala Val Gly
Gly Thr Val Thr Ile Lys Cys Gln Ala Ser Glu Asn Ile Asp Ile Leu
Leu Ala Trp Tyr Gln Gln Lys Val Gly Gln Pro Pro Lys Leu Leu Ile
Tyr Arg Ala Ser Lys Leu Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys

Gly Asp Ala Ala Thr Tyr Tyr Cys Gln Ser Asn Val Gly Ser Thr Ala

Arg Ser Ser Tyr Gly Asn Ala Phe Gly Gly Gly Thr Glu Val Val Val

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Lys

<212> DNA

100

80

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Tyr Val Ser Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Leu Leu

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Ile Tyr Asp Asn Asn Ser Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
                        55
Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
                    70
                                        75
Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
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                85
Ser Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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                                                     110
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<211> 354
<212> DNA
<213> Homo sapiens
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ccaggcaagg ggctggagtg ggtggcaatt atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagectgag agecgaggae acggetgtgt attactgtge gagagatgae 300
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<213> Homo sapiens
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                                25
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
        35
                            40
Ala Ile Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                                         75
                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Asp Asp Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr
            100
                                 105
Thr Val Thr Val Ser Ser
        115
<210> 89
<211> 330
<212> DNA
<213> Homo sapiens
<400> 89
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ccaagaacag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180
gaccgattet etggetecaa gtetggeacg teagecacce tggteateac eggaetecag 240
actggggacg aggccgatta ttactgcgga gcatgggata gcagcctgag tgctggggta 300
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ttcggcggag ggaccaagct gaccgtccta
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<212> PRT
<213> Homo sapiens
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Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
                                25
Tyr Val Ser Trp Cys Gln Gln Leu Pro Arg Thr Ala Pro Lys Leu Leu
Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Val Ile Thr Gly Leu Gln
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                                         75
Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Ala Trp Asp Ser Ser Leu
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Ser Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
                                105
<210> 91
<211> 363
<212> DNA
<213> Homo sapiens
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ccaqqcaaqq qqctqqaqtq qqtqqcaqtt atatqqtatq atqqaaataa taaatactat 180
gcagacteeg tgaagggeeg atteaceate teeagagaea atteeaagaa eaegetatat 240
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gactacggtg gtaaccctta ctttgactac tggggccaag ggaccctggt caccgtctcc 360
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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                                 25
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 4.5
        35
                             40
Ala Val Ile Trp Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                                         75
                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Ser Asp Tyr Gly Gly Asn Pro Tyr Phe Asp Tyr Trp Gly
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Gln Gly Thr Leu Val Thr Val Ser Ser
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<212> DNA
<213> Homo sapiens
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caggeeectg taettgteat etatggtaga aacaacegge eeteagggat eecagaeega 180
ttctctggct ccagetcagg actcacaget teettgaceg teactgggge tcaggeggaa 240
gatgaggotg actattactg taactcccgg gacagcagtt ataaccatgt ggcattcggc 300
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ggagggacca agctgaccgt ccta
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<212> PRT
<213> Homo sapiens
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Ser Trp Tyr Gln Gln Arg Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
        35
                            40
Gly Arg Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
    50
                        55
Ser Ser Gly Leu Thr Ala Ser Leu Thr Val Thr Gly Ala Gln Ala Glu
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Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Tyr Asn His
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Val Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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<210> 95
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<212> DNA
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<210> 96
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<213> Homo sapiens
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Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Gly Asp Ser Val
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                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                                         75
Val Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                85
                                    90
Ala Arg Glu Ser Asp Tyr Gly Gly Asn Pro Tyr Phe Asp Tyr Trp Gly
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                                105
Gln Gly Thr Leu Val Thr Val Ser Ser
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ttctctggct ccagctcagg aaacacagct tccttgaccg tcactggggc tcaggcggaa 240
gatgaggetg actattactg taagteeegg gacageagtt ttaaccatgt gacattegge 300
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                                 25
Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
        35
                            40
                                                 45
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
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Ser Ser Gly Asn Thr Ala Ser Leu Thr Val Thr Gly Ala Gln Ala Glu
                                         75
Asp Glu Ala Asp Tyr Tyr Cys Lys Ser Arg Asp Ser Ser Phe Asn His
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                                     90
Val Thr Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
<210> 99
<211> 348
<212> DNA
<213> Homo sapiens
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teetgtaagg gttetggata eagetttaee agtgaetgga teggetgggt gegeeagatg 120
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cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac 180
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ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gaggagtggt 300
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<212> PRT
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Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Asp
                                 25
            20
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
        35
                                                 45
                             40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                                             60
                        55
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Thr Thr Ala Tyr
                                                             80
                                         75
65
                    70
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                     90
                                                         95
                85
Ala Arg Ser Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val
            100
                                 105
Thr Val Ser Ser
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<210> 101
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<212> DNA
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tectgeactg ggageagete caacateggg geaggttatg atgtacactg gtaceageag 120
tttccaggaa cagcccccaa actcctcatc tatggtaaca gcaatcggcc ctcaggggtc 180
cctgaccgat tetetggete caagtetgge aceteageet eeetggeeat eactgggete 240
caggctgagg atgaggctga ttattactgc cagtcctatg acagcagcct gagtggttcg 300
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Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly
                                 25
Tyr Asp Val His Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Leu
Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe
                                             60
Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu
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Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser
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Leu Ser Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaataccat 180
gcagactecg tgaagggeeg atteaceate tecagagaea atteeaagaa caegetgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagagaat 300
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gtcaccgtct cctca
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<213> Homo sapiens
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                                25
Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr His Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
                85
Ala Arg Glu Asn Thr Met Val Arg Gly Gly Asp Tyr Tyr Gly Met
                                105
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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caggececta taettgteat etatggtaaa aacaacegge eeteagggat eecagacega 180
ttetetgget ecageteagg aaacacaget teettgacea teaetgggge teaggeggaa 240
gatgaggetg actattactg taacteeegg gaeageagtg gtaaceatet ggtgttegge 300
ggagggacca agctgaccgt ccta
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<213> Homo sapiens

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                                25
Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ile Leu Val Ile Tyr
        35
                                                 4.5
                            40
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
                        55
                                             60
Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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                    70
Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
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                                    90
Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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<210> 107
<211> 366
<212> DNA
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teetgeaagg ettetggtta eacetttace agetatggta teagetgggt gegaeaggee 120
cctggacaag ggcttgagtg gatgggatgg atcagcgctt acaatgttaa cacaaactat 180
gcacagaagc tecagggeag agteaceatg accacagaca catecaegaa cacageetae 240
atggaactga ggagcctgag atctgacgac acggccgtgt attactgtgc gagagatcct 300
ataactgaaa ctatggagga ctactttgac tactggggcc agggaaccct ggtcaccgtc 360
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<211> 122
<212> PRT
<213> Homo sapiens
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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35
Gly Trp Ile Ser Ala Tyr Asn Val Asn Thr Asn Tyr Ala Gln Lys Leu
                        55
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr
                                                             80
65
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
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                                     90
Ala Arg Asp Pro Ile Thr Glu Thr Met Glu Asp Tyr Phe Asp Tyr Trp
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Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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ttctctggct ccagctcagg aaacacagct tccttgacca tcactggggc tcaggcggaa 240
gatgaggctg actattactg taactcccgg gacagcagtg gtaatcatct ggtattcggc 300
ggagggacca agttgaccgt ccta
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<211> 107
<212> PRT
<213> Homo sapiens
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Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Asn Tyr Tyr Ala
                                                     30
                                25
            20
Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ile Leu Val Ile Tyr
        35
                            40
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
                        55
    50
Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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65
                    70
Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
                85
                                    90
Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val
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<212> DNA
<213> Homo sapiens
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tcctgtgcag cgtctggatt caccttcagc agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagaaa taaatacaat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgaat 240
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<213> Homo sapiens
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35
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Ala Val Ile Trp Tyr Asp Gly Arg Asn Lys Tyr Asn Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Asn
                                                             80
65
                    70
                                        75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
                85
Ala Arg Asp Leu Thr Tyr Tyr Asp Ile Leu Gly Gly Met Asp Val Trp
                                105
                                                     110
            100
Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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cttccaggaa cagcccccag actcctcatc tatggtaaca acaatcgtcc ctcaggggtc 180
cctgaccgat tctctggctc caagtctggc acctcagcct ccctggccat cactgggctc 240
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gtgttcggcg gagggaccaa gctgaccgtc cta
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<211> 111
<212> PRT
<213> Homo sapiens
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Gln Ser Val Leu Thr Gln Ser Pro Ser Val Ser Gly Ala Pro Gly Gln
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Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly
                                25
Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Arg Leu
Leu Ile Tyr Gly Asn Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe
Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu
65
                    70
                                         75
                                                             80
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser
                                     90
                                                         95
Leu Ser Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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                                105
                                                     110
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<212> DNA
<213> Homo sapiens
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ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagaaa taaatacaat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgaat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagattta 300
acgtattacg atattttggg cggtatggac gtctggggcc aagggaccac ggtcaccgtc 360
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tcctca 366 <210> 116 <211> 122-<212> PRT <213> Homo sapiens <400> 116 Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Val Ile Trp Tyr Asp Gly Arg Asn Lys Tyr Asn Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Asn Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Asp Leu Thr Tyr Tyr Asp Ile Leu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser 115 <210> 117 <211> 324 <212> DNA <213> Homo sapiens <400> 117 tettetgage tgacteagga ecetgetgtg tetgtggeet tgggacagae agteaggate 60 acatgccaag gagacagcet cagaagatat tatgcaaget ggtaccagca gaagccagga 120 caggccccta tagttgtcat ctatggtaaa aaaaaccggc cctcagggat cccagaccga 180 ttetetgget ceageteagg aaacacaget teettgacea teactgggge teaggeggaa 240 gatgaggetg actattactg taagteeegg gacageagtg gtaaccatet ggtattegge 300 ggagggacca agctgaccgt ccta <210> 118 <211> 108 <212> PRT <213> Homo sapiens <400> 118 Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 1 15 10 Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Arg Tyr Tyr Ala 30 Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ile Val Val Ile Tyr 35 Gly Lys Lys Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 50 55 Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 70 75 Asp Glu Ala Asp Tyr Tyr Cys Lys Ser Arg Asp Ser Ser Gly Asn His 90 Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu

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<213> Homo sapiens
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ccagggaagg gtctggagtg ggtctcagtt atttatagcg gtggtggcac atactacgca 180
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgcgag aggaccgggg 300
tcctttgact actggggcca gggaaccctg gtcaccgtct cctca
<210> 120
<211> 115
<212> PRT
<213> Homo sapiens
<400> 120
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                                     10
                                                         15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
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Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Gly Gly Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
65
                    70
                                         75
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                                         95
Arg Gly Pro Gly Ser Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
                                105
Val Ser Ser
        115
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<211> 321
<212> DNA
<213> Homo sapiens
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atcacttgtc gggcgagtca gggtattagc agctggttag cctggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagat tttactctca ccatcagcag cctgcagcct 240
gaagattttg caagttacta ttgtcaacag gctaacagtt tcccgtggac gttcggccaa 300
gggaccaagg tggaaatcaa a
<210> 122
<211> 107
<212> PRT
<213> Homo sapiens
<400> 122
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
                                       Page 38
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65
Glu Asp Phe Ala Ser Tyr Tyr Cys Gln Gln Ala Asn Ser Phe Pro Trp
                                     90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<211> 369
<212> DNA
<213> Homo sapiens
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ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtat taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagagcgg 300
gatagcagtg gctggtacta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
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gtctcctca
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<211> 123
<212> PRT
<213> Homo sapiens
<400> 124
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                                     10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                         75
                                                             80
65
                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                     90
Ala Arg Glu Arg Asp Ser Ser Gly Trp Tyr Tyr Tyr Gly Met Asp Val
                                 105
            100
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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                             120
<210> 125
<211> 321
<212> DNA
<213> Homo sapiens
<400> 125
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca cagtcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtc tcccgctcac tttcggcgga 300
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gggaccaagg ttgagatcaa a
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<211> 107
<212> PRT
<213> Homo sapiens
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                                                 45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Val Ser Ser Leu Gln Pro
                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Leu Pro Leu
                                                         95
                                     90
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<212> DNA
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ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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acggtcaccg tctcctca
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<211> 126
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<213> Homo sapiens
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
                                                         15
                                     10
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
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                                                     30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                         55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
                                                              80
65
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg Glu Gly Ile Ala Val Ala Gly Pro Pro Tyr Tyr Tyr Gly
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                                105
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<211> 318
<212> DNA
<213> Homo sapiens
<400> 129
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gggaaagccc ctaagctcct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180
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<212> PRT
<213> Homo sapiens
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Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                            40
                                                 45
Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Ile Ala Thr Tyr Tyr Cys His Gln Cys Asp Asn Leu Pro His
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
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<212> DNA
<213> Homo sapiens
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ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagagcgg 300
gatagcagtg gctggtacta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
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gtctcctca
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<211> 123

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Ile Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                                             80
65
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                     90
Ala Arg Glu Arg Asp Ser Ser Gly Trp Tyr Tyr Tyr Gly Met Asp Val
                                 105
                                                     110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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                            120
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<211> 107
<212> PRT
<213> Homo sapiens
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                                                 45
        35
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Arg Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65
                    70
                                         75
Glu Asp Phe Ala Ser Tyr Tyr Cys Leu Gln His Arg Ser Tyr Pro Leu
                                                         95
                                     90
Thr Phe Gly Gly Thr Lys Val Glu Ile Lys
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<210> 135
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<211> 345

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<213> Homo sapiens
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teetgtgeag cetetgggtt eacegteagt ageaactaea tgagetgggt eegeeagget 120
ccagggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca 180
qactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgcgag aggcgaagga 300
ggtatggacg tctggggcca agggaccacg gtcaccgtct cctca
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<400> 136
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
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Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
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65
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Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Arg Gly Glu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
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Val Ser Ser
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<212> DNA
<213> Homo sapiens
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ggccaggctc ccaggctcct catctatggt gcatccatca gggccactgg tatcccagcc 180
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
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40
Tyr Gly Ala Ser Ile Arq Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Ser
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Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Phe
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Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
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ccagggaagg ggctggagtg ggtttcatac attagtagaa gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240
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Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Tyr Ile Ser Arg Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
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                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
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                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Ser Leu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val
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                                 105
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Thr Val Ser Ser
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gggaaagccc ctgagctcct gatctatgct gcatccaatt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
qaaqattttq caacttacta ctgtcaacaq agttccagta ccctcatcac cttcggccaa 300
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Page 45

105

100

Val Ser Ser

115

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<212> DNA
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ggccaggctc ccagactcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtaggac tgggacagag ttcactctca ccatcagcag cctgcagtct 240
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            20
                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
                            40
                                                 45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50
                        55
Ser Arg Thr Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
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                                         75
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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ccagggaagg ggctggagtg ggtttcatac attagtagaa gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gagatcttta 300
ggcggtatgg acgtctgggg ccaagggacc acggtcaccg tctcctca
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<211> 116
<212> PRT
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                                     10
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25
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Tyr Ile Ser Arg Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
                                                             80
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                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
Ala Arg Ser Leu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val
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Thr Val Ser Ser
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qqqaaaqccc ctgagctcct gatctatgct gcattcaatt tacaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttccagta ccctcatcac cttcggccaa 300
gggacacgac tggagattaa a
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<211> 107
<212> PRT
<213> Homo sapiens
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Leu Asn Trp Tyr His Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile
Tyr Ala Ala Phe Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Ser Thr Leu Ile
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
<210> 151
<211> 345
<212> DNA
<213> Homo sapiens
<400> 151
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teetgtgeag cetetgggtt cacegteagt ageaactaca tgagetgggt cegeeagget 120
ccaqqqaaqq ggctgqaqtq ggtctcagtt atttatagcq gtggtagcac atactacgca 180
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gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgcgag aggcgaagga 300
ggtatggacg tctggggcca agggaccacg gtcaccgtct cctca
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<211> 115
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<213> Homo sapiens
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Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
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                                         75
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Arg Gly Glu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
                                105
                                                     110
Val Ser Ser
        115
<210> 153
<211> 324
<212> DNA
<213> Homo sapiens
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caggeeeetg tgetggteat etatgaggae ageaaacgae eeteegggat eeetgagaga 180
ttctctggct ccagctcagg gacaatggcc accttgacta tcaatggggc ccaggtggag 240
gatgaagetg actactactg ttactcaacg gacagcagtg gtaatcatgt ggtattegge 300
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ggagggacca agctgaccgt ccta
<210> 154
<211> 108
<212> PRT
<213> Homo sapiens
<400> 154
Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln
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Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys Lys Tyr Val
                                25
                                                     30
Tyr Trp Tyr Gln Gln Lys Ser Gly Gln Ala Pro Val Leu Val Ile Tyr
        35
                            40
Glu Asp Ser Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
                        55
Ser Ser Gly Thr Met Ala Thr Leu Thr Ile Asn Gly Ala Gln Val Glu
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                                         75
Asp Glu Ala Asp Tyr Tyr Cys Tyr Ser Thr Asp Ser Ser Gly Asn His
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gggaaagccc ctgaggtcct gatctatgct gcatccaatt tgcaacgtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
qaaqattttg caacttacta ctgtcaacag agttccagta ccctcatcac cttcggccaa 300
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gggacacgac tggagattaa a
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<211> 107
<212> PRT
<213> Homo sapiens
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Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Val Leu Ile
                            40
                                                 45
Tyr Ala Ala Ser Asn Leu Gln Arg Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                    70
                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Ser Thr Leu Ile
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
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<212> DNA
<213> Homo sapiens
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ccagggaagg ggctggagtg ggtctcatct attagtagta gtagtagtta catatactac 180
gcagactcag tgaagggccg attcaccatc tccagagaca acgccaagaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagggggggt 300
ataactggaa ctacgaacta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
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gtctcctca
<210> 158
<211> 123
<212> PRT
<213> Homo sapiens
<400> 158
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Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
Ala Arg Gly Gly Ile Thr Gly Thr Thr Asn Tyr Tyr Gly Met Asp Val
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                                105
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
<210> 159
<211> 321
<212> DNA
<213> Homo sapiens
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gggaaagccc ctgaactcct gatctatgct gcatttaatt tgcaaagtgg ggtcccatca 180
aggatcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaccct 240
gaagattttg caacttacta ctgtcaacag agttccagta ccctcatcac cttcggccaa 300
gggacacgac tggagattaa a
<210> 160
<211> 107
<212> PRT
<213> Homo sapiens
<400> 160
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Gln Ser Ile Ser Ser Tyr
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile
Tyr Ala Ala Phe Asn Leu Gln Ser Gly Val Pro Ser Arg Ile Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu His Pro
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                    70
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Ser Thr Leu Ile
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
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<210> 161
<211> 375
<212> DNA
<213> Homo sapiens
<400> 161
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gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240
atggagetga geaggetgag atetgaegae aeggeegtgt attaetgtge gagageeeet 300
 ctctggacgg tacgtagctg gtactactac ggtatggacg tctggggcca agggaccacg 360
 gtcaccgtct cctca
 <210> 162
 <211> 125
 <212> PRT
 <213> Homo sapiens
 <400> 162
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 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
                         55
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                                     90
Ala Arg Ala Pro Leu Trp Thr Val Arg Ser Trp Tyr Tyr Tyr Gly Met
                                 105
                                                     110
 Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
                             120
 <210> 163
 <211> 330
<212> DNA
 <213> Homo sapiens
 <400> 163
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 tectgetetg gaageagete caacattggg aataattatg tateetggta eeageagete 120
ccaggaatag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180
gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240
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ttcggcggag ggaccaagct gaccgtccta
<210> 164
<211> 110
 <212> PRT
<213> Homo sapiens
. <400> 164
Gln Ser Val Leu Thr Gln Pro Pro Ser Met Ser Ala Ala Pro Gly Gln
                                     10
                                                          15
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 Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
             20
                                 25
                                                      30
 Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Ile Ala Pro Lys Leu Leu
 Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
     50
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Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
                                     90
Ser Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
                                 105
<210> 165
<211> 348
<212> DNA
<213> Homo sapiens
<400> 165
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teetgtaaga ettetgaata eagetttaee agetaetgga teggetgggt gegeeagatg 120
cccgggaaag gcctggagtg gatggggatc atctatcttg gtgactcaga taccagatac 180
agecegtect tecaaggeea ggteaceate teageegaca agtecateag tacegeetae 240
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tggggtcttg actactgggg ccagggaacc ctggtcaccg tctcctca
<210> 166
<211> 116
<212> PRT
<213> Homo sapiens
<400> 166
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
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1
                                     10
Ser Leu Lys Ile Ser Cys Lys Thr Ser Glu Tyr Ser Phe Thr Ser Tyr
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
        35
Gly Ile Ile Tyr Leu Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                        55
                                             60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                    70
                                         75
                                                             80
65
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                                     90
                                                         95
Ala Arg Ser Asn Trp Gly Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val
                                 105
            100
Thr Val Ser Ser
        115
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<211> 333
<212> DNA
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cetgacegat tetetggete caagtetgge aceteageet ceetggeeat caetgggete 240
caggetgagg atgaggetga ttattactge cagteetatg acageageet gagtggtteg 300
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gtgttcggcg gagggaccaa gctgaccgtc ctt
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<211> 111
<212> PRT
<213> Homo sapiens
<400> 168
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Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly
Tyr Asp Val His Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Leu
Leu Ile Gln Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe
Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu
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                                         75
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser
                                    90
Leu Ser Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
                                105
<210> 169
<211> 351
<212> DNA
<213> Homo sapiens
<400> 169
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cctggacaag ggcttgagtg gatgggatgg atcagegctt acaatgataa cacaaactat 180
gcacagaagc tecagggcag agteaceatg accacagaca catecacgag cacagectae 240
atggaactga ggagcctgag atctgacqac acggccqtqt attactqtqc gagaacqttt 300
accagtggct ttgactactg gggccaggga accctggtca ccgtctcctc a
<210> 170
<211> 117
<212> PRT
<213> Homo sapiens
<400> 170
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Phe Tyr
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Ser Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
                            40
Gly Trp Ile Ser Ala Tyr Asn Asp Asn Thr Asn Tyr Ala Gln Lys Leu
    50
                        55
                                             60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                    70
                                         75
                                                             80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                                    90
                                                         95
Ala Arg Thr Phe Thr Ser Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu
            100
                                105
Val Thr Val Ser Ser
        115
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<212> DNA
<213> Homo sapiens
<400> 171
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caggececta tacttgteat etatggtaaa aacaacegge eeteagggat eecagaeega 180
ttctctggct ccagctcagg aaacacagct tccttgacca tcactggggc tcaggcggaa 240
gatgaggctg actattactg taactcccgg gacagcagtg gtaaccatct ggtgttcggc 300
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<210> 172
<211> 108
<212> PRT
<213> Homo sapiens
<400> 172
Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln
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                                                     30
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Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ile Leu Val Ile Tyr
                            40
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
    50
                        55
Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
                    70
                                         75
Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
                                     90
Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
            100
<210> 173
<211> 375
<212> DNA
<213> Homo sapiens
<400> 173
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tectgtgeag egtetggatt tacetteagt agttatgaea tgeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaataccat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagagaat 300
actatggttc ggggggggga ctactactac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctca
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Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr His Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Asn Thr Met Val Arg Gly Gly Asp Tyr Tyr Tyr Gly Met
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                                                     110
Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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                                                 125
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<213> Homo sapiens
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aggaaageee etaagegeet gatetttget gegteeagtt tgeaaagtgg ggteeeatea 180
aggttcagcg gcagtggatc tgggccagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt accegeteae ttteggegga 300
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gggaccaagg tggagatcaa a
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<213> Homo sapiens
<400> 176
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Leu Gly Trp Tyr Gln Gln Lys Pro Arg Lys Ala Pro Lys Arg Leu Ile
Phe Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Pro Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 177
<211> 354
<212> DNA
<213> Homo sapiens
<400> 177
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acctgcactg tototggtgg ctocatcagt agttactact ggagetggat ccggcagece 120
ccagggaagg gactggagtg gattgggtat ttctattaca gtgggagcac caactacaac 180
ccctccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240
aagctgaggt ctgtgaccgc tgcggacacg gccgtgtatt actgtgcgag agataggttt 300
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<211> 118
<212> PRT
<213> Homo sapiens
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Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
Gly Tyr Phe Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
    50
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Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
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                                         75
Lys Leu Arg Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
Arg Asp Arg Phe Thr Ser Gly Trp Phe Asp Tyr Trp Gly Gln Gly Thr
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Leu Val Thr Val Ser Ser
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<212> DNA
<213> Homo sapiens
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aggaaagccc ctaagcgcct gatctttgct gcgtccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggccagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt accegeteae ttteggegga 300
gggaccaagg tggagatcaa a
<210> 180
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
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Leu Gly Trp Tyr Gln Gln Lys Pro Arg Lys Ala Pro Lys Arg Leu Ile
                                                 45
Phe Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        5.5
Ser Gly Ser Gly Pro Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                         75
                    70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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L. JANAO LULIA
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<211> 345
<212> DNA
<213> Homo sapiens
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ccagggaagg ggctggagtg ggtctcagtt atttatagcg gtggtaacac atactacgca 180
gactoogtga agggoogatt caccatotoo agagacaatt coaagaacac gotatttott 240
caaatgaaca gootgaaaac cgaggacacg googtgtatt actgtgogag aggtocoggg 300
gcttttgata tctggggcca agggacaatg gtcaccgtct cttca
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<211> 115
<212> PRT
<213> Homo sapiens
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Asn Asn
Tyr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Gly Asn Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe Leu
                    70
                                         75
Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                    90
                                                         95
Arg Gly Pro Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr
Val Ser Ser
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<211> 321
<212> DNA
<213> Homo sapiens
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ggccaggete ccaggetect catetatggt geatecacea gggccaetgg tateccagee 180
agattcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataact ggcctttcac cttcggccaa 300
gggacacgac tggagattaa a
                                                                   321
<210> 184
<211> 107
<212> PRT
<213> Homo sapiens
<400> 184
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
                                       Page 57
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10
Glu Arg Val Thr Leu Ser Cys Arg Ala Ser Gln Ser Ala Thr Ser Asn
                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
                            40
                                                45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
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Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Phe
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Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
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<210> 185
<211> 345
<212> DNA
<213> Homo sapiens
<400> 185
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teetgtgeag cetetgggtt caeegteagt ageaactaca tgagttgggt eegeeagget 120
ccagggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca 180
gactocgtga agggccgatt caccatotoc agagacaatt ccaagaacac gotgtatott 240
caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgcgag aggtcccggg 300
gettttgata tetggggeea agggaeaatg gteacegtet ettea
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<211> 115
<212> PRT
<213> Homo sapiens
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
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Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                                         75
                    70
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                     90
Arg Gly Pro Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr
Val Ser Ser
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<210> 187
<211> 327
<212> DNA
<213> Homo sapiens
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atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtttca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccaatt ttctaagtgg ggtcccatca 180
aggttcagcg gcagtggctc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
qaaqatttta caacttatta ctgtctacag cataatcctt accctccgag gctcactttc 300
qqcqqaqqqa ccaaggtaga gatcaaa
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Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                                                 45
                            40
Tyr Ala Ala Ser Asn Phe Leu Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Phe Thr Tyr Tyr Cys Leu Gln His Asn Pro Tyr Pro Pro
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Arg Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagagggg 300
gactacqqtq qtaaccetta ctttqactac tqqqqccaqq qaaccetqqt caccqtctcc 360
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                         55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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90
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                85
Ala Arg Glu Gly Asp Tyr Gly Gly Asn Pro Tyr Phe Asp Tyr Trp Gly
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                                                     110
Gln Gly Thr Leu Val Thr Val Ser Ser
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caggcccctg tacttgtcat ctatggtaaa aacaaccggc cctcagggat cccagaccga 180
ttetetgget ceageteaga aaacacaget teettgaeca teaetgggge teaggeggaa 240
gatgaggetg actattactg taagteeegg gacageagtt ttaaccatet ggtattegge 300
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ggagggacca agttgaccgt ccta
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<211> 108
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Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
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                                                 45
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
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                        55
                                             60
Ser Ser Glu Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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Asp Glu Ala Asp Tyr Tyr Cys Lys Ser Arg Asp Ser Ser Phe Asn His
Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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ccaggcaagg ggctggagtg ggtggcagtt atatggcatg atggaagtaa taaatactat 180
gcagacteeg tgaagggeeg atteaceate teeagagaea atteeaagaa eaegetgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtac aagagagggg 300
gactacggtg gttaccetta etttgaetae tggggecagg gaaccetggt cacegtetee 360
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<210> 194
<211> 121
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Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu

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40
                                                 45
        35
Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe
                        55
                                             60
Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu
                                                             80
65
                    70
                                         75
Gln Ala Glu Asp Glu Thr Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser
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Leu Ser Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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<210> 201
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gcagactceg tgaagggeeg atteaceate tecagagaea attecaagaa eaegetgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtac aagagagggg 300
gactacggtg gttaccetta etttgactae tggggecagg gaaccetggt cacegtetee 360
tca
                                                                    363
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<211> 121
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<213> Homo sapiens
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                                 25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
                                                 45
Ala Val Ile Trp His Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                    70
                                         75
                                                              8.0
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Thr Arg Glu Gly Asp Tyr Gly Gly Tyr Pro Tyr Phe Asp Tyr Trp Gly
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Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 203
<211> 324
<212> DNA
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caggececta taettgteat etatggtaaa aacaacegge eeteagggat eecagaeega 180
ttctctggct ccagctcagg aaacacagct tccttgacca tcactggggc tcaggcggaa 240
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<212> PRT
<213> Homo sapiens
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Thr Val Arg Ile Thr Cys Gln Gly Asp Ile Leu Arg Ser Tyr Tyr Ala
Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ile Leu Val Ile Tyr
                                                 45
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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                                         75
Asp Glu Ala Asp Tyr Tyr Cys Lys Ser Arg Asp Ser Ser Tyr Asn His
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Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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<212> DNA
<213> Homo sapiens
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tectgtgcag egtetggatt cacetteagt agetatggca tgeactgggt cegecagget 120
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acggtgacta aggagggcta ctactactac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctca
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<211> 125
<212> PRT
<213> Homo sapiens
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                                     10
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                    70
                                                             80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Thr Thr Val Thr Lys Glu Gly Tyr Tyr Tyr Gly Met
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<212> DNA
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a
                                                                   321
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<211> 107
<212> PRT
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                            40
                                                 45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctatat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagatcccgc 300
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                                    90
Ala Arg Ser Arg Tyr Gly Asp Trp Gly Trp Phe Asp Pro Trp Gly Gln
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Gly Thr Leu Val Thr Val Ser Ser
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gaccgattct ctggctccaa gtctggcacc tcagcctccc tggccatcag tgggctccag 240
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Thr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
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Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
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Asn Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagatccc 300
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Ala Ile Ile Trp Tyr Asp Gly Ser Asn Glu Tyr Tyr Gly Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Asp Pro Leu Arg Ile Val Val Ala Gly Asp Phe Asp Tyr Trp
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Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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ggccaggete ccaggeteet catetatggt geatecacea gggccaetgg ttteccagee 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataact ggccgctcac tttcggcgga 300
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gggaccaagg tggagatcaa a
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<212> PRT
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ile Ser Asn
Leu Ala Trp Tyr Gln Gln Gln Pro Gly Gln Ala Pro Arg Leu Leu Ile
Tyr Gly Ala Ser Thr Arq Ala Thr Gly Phe Pro Ala Arq Phe Ser Gly
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Thr Thr Val Thr Lys Glu Gly Tyr Tyr Tyr Gly Met
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Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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<211> 125
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<213> Homo sapiens
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Asp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Ile Ile Ser Tyr Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg Glu Asn Ala Val Thr Tyr Gly Gly Tyr Tyr His Tyr Gly Met
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Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300
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gggaccaagg tggagatcaa a
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<211> 107
<212> PRT
<213> Homo sapiens
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                            40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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teetgtaeaa eatetggatt eacetteagt aactatggea tgeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atctggtatg atggaagtat taaatactat 180
gtagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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gattgtggtg gtgactgtta cagccactac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctca
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<211> 125
<212> PRT
<213> Homo sapiens
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20
                                 25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Val Asp Ser Val
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                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
                                                         95
Ala Arg Glu Lys Asp Cys Gly Gly Asp Cys Tyr Ser His Tyr Gly Met
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Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacgtatta ctgtctacag catatgagtc tecegeteac ttteggegga 300
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gggaccaagg tggagatcaa a
<210> 228
<211> 107
<212> PRT
<213> Homo sapiens
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
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Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Met Ser Leu Pro Leu
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<210> 229
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teetgtacaa catetggatt cacetteagt aactatggea tgeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atctggtatg atggaagtat taaatactat 180
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qtagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
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gattgtggtg gtgactgtta cagccactac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctca
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                                 25
                                                     30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35
                             40
                                                 45
Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Val Asp Ser Val
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                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                    70
                                         75
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                                         95
                85
                                     90
Ala Arg Glu Lys Asp Cys Gly Gly Asp Cys Tyr Ser His Tyr Gly Met
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Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacgtatta ctgtctacag catatgagtc tcccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a
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<211> 107
<212> PRT
<213> Homo sapiens
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
            20
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                             40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
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Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Met Ser Leu Pro Leu
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gtagacteeg tgaagggeeg atteaceate tecagagaea attecaagaa caegetgtat 240
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gattgtggtg gtgactgtta cagccactac ggtatggacg tctggggcca agggaccacg 360
gtcaccgtct cctca
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<213> Homo sapiens
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Ile Lys Tyr Tyr Val Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                    70
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                                                             80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Glu Lys Asp Cys Gly Gly Asp Cys Tyr Ser His Tyr Gly Met
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Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<211> 107
<212> PRT
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aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
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<211> 107
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<213> Homo sapiens
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35
                            40
                                                 45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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65
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Met Ser Leu Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<210> 241
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<211> 122
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                                     10
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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Ala Val Ile Trp Tyr Asp Gly Arg Asn Lys Tyr Asn Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Asn
65
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
                85
Ala Arg Asp Leu Thr Tyr Tyr Asp Ile Leu Gly Gly Met Asp Val Trp
            100
                                105
Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
                            120
<210> 243
<211> 321
<212> DNA
<213> Homo sapiens
<400> 243
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ctctcctgca gggccagtca gagtgttacc agcaacttag cctggtacca gcagaaacct 120
ggccaggete ecaggeteet catetatggt geatecacea gggccaetgg tateccagee 180
aggttcagtg gcagtgggtc tgggacagaa ttcactctca ccatcagcag cctgccgtct 240
gaagattttg cagtttatta ctgtcagcag tatcatacct ggccattcac tttcggccct 300
gggaccaaag tggatatcaa a
                                                                   321
<210> 244
<211> 107
<212> PRT
<213> Homo sapiens
<400> 244
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Ser Asn
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Pro Ser
65
                                        75
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr His Thr Trp Pro Phe
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
            100
<210> 245
<211> 366
<212> DNA
<213> Homo sapiens
<400> 245
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
teetgtgeag egtetggatt cacetteage agetatggea tgeactgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagaaa taaatacaat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgaat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagattta 300
acgtattacg atattttggg cggtatggac gtctggggcc aagggaccac ggtcaccgtc 360
```

tcctca 366

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<210> 246
<211> 122
<212> PRT
<213> Homo sapiens
<400> 246
Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg
 1
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
                                                45
Ala Val Ile Trp Tyr Asp Gly Arg Asn Lys Tyr Asn Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Asn
65
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                    90
Ala Arg Asp Leu Thr Tyr Tyr Asp Ile Leu Gly Gly Met Asp Val Trp
                                105
                                                     110
            100
Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
                            120
<210> 247
<211> 321
<212> DNA
<213> Homo sapiens
<400> 247
gaaatagtga tgacgcagtc tccatccacc ctgtctgtgt ctccggggga aagagccacc 60
ctctcctgca gggccagtca gagtgttacc agcaacttag cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagaa ttcactctca ccatcagcag cctgccgtct 240
gaagattttg cagtttatta ctgtcagcag tatcatacct ggccattcac tttcggccct 300
                                                                   321
gggaccaaag tggatatcaa a
<210> 248
<211> 107
<212> PRT
<213> Homo sapiens
<400> 248
Glu Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Val Ser Pro Gly
1
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Ser Asn
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Pro Ser
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr His Thr Trp Pro Phe
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Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys

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<210> 249
<211> 366
<212> DNA
<213> Homo sapiens
<400> 249
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
teetgtgeag egtetggatt eacetteage agetatggea tgeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagaaa taaatacaat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgaat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagattta 300
acgtattacg atattttggg cggtatggac gtctggggcc aagggaccac ggtcaccgtc 360
tcctca
<210> 250
<211> 122
<212> PRT
<213> Homo sapiens
<400> 250
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
                                25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Arg Asn Lys Tyr Asn Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Asn
                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
Ala Arg Asp Leu Thr Tyr Tyr Asp Ile Leu Gly Gly Met Asp Val Trp
Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115
                            120
<210> 251
<211> 321
<212> DNA
<213> Homo sapiens
<400> 251
gacatecaga tgacecagte tecatectee etgtetgeat etgtaggaga cagagteace 60
atcacttgcc gggcaagtca gggcattaga catgatttag gctggtatca gcagaaacca 120
gggaaagccc ctgagcgcct gatctatggt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a
                                                                   321
<210> 252
<211> 107
<212> PRT
<213> Homo sapiens
<400> 252
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg His Asp
            20
                                25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Arg Leu Ile
                            40
Tyr Gly Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                    70
                                        75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
                                    90
                85
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
<210> 253
<211> 402
<212> DNA
<213> Homo sapiens
<400> 253
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teetgtgeag egtetggatt eacetteagt agetatggea tgeaetgggt eegeeagget 120
ccaggcaagg ggctggagtg ggtggcagtg atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaggtaat 300
cgcgtagtag tggctggtac gagggtaact cccgctaact ggggatacta ctattacgga 360
atggacgtct ggggccaagg gaccacggtc accgtctcct ca
<210> 254
<211> 134
<212> PRT
<213> Homo sapiens
<400> 254
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Arg Gly Asn Arg Val Val Val Ala Gly Thr Arg Val Thr Pro Ala
Asn Trp Gly Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr
                            120
        115
Thr Val Thr Val Ser Ser
    130
<210> 255
<211> 321
<212> DNA
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<213> Homo sapiens <400> 255 gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60 atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120 gggaaagccc ctaagtgcct gatctatgtt gcatccagtt tgcaaagtgg ggtcccatca 180 aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240 gaagattttg caacttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300 gggaccaagg tggagatcaa a 321 <210> 256 <211> 107 <212> PRT <213> Homo sapiens <400> 256 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 10 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp 20 25 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Cys Leu Ile 40 45 Tyr Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 55 60 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 <210> 257 <211> 348 <212> DNA <213> Homo sapiens <400> 257 gaggtgcaac tggtggagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc 60 teetgtgeag cetetggatt cacetteagt aattatggea tgaactgggt cegeeagget 120 ccagggaagg ggctggagtg ggtttcatac ataagtaata gtattacttc caaatactac 180 getgaetetg tgaagggeeg atteaceate teeagagaea atgeeaagaa tteaetgtat 240 ctgcaaatga acagcctgag agacgtggac acggctgtgt atcactgtgc gagaggaccg 300 ggcgggtttg actactgggg ccagggaacc ctggtcaccg tctcctca 348 <210> 258 <211> 116 <212> PRT <213> Homo sapiens <400> 258 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Tyr Ile Ser Asn Ser Ile Thr Ser Lys Tyr Tyr Ala Asp Ser Val

60

55

```
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Asp Val Asp Thr Ala Val Tyr His Cys
                85
                                    90
Ala Arg Gly Pro Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
            100
                                105
Thr Val Ser Ser
        115
<210> 259
<211> 321
<212> DNA
<213> Homo sapiens
<400> 259
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atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc cgaagtgcct gatctatgtt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt accegtggac gttcggccaa 300
                                                                   321
gggaccaagg tggaaatcaa a
<210> 260
<211> 107
<212> PRT
<213> Homo sapiens
<400> 260
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
                 5
                                     10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
                                25
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Cys Leu Ile
        35
                            40
                                                 45
Tyr Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65
                    70
                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                     90
                                                         95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
<210> 261
<211> 366
<212> DNA
<213> Homo sapiens
<400> 261
gaggtgcagc tgttggagtc tgggggaggc ttggtacagc cgggggggtc cctgagactc 60
teetgtgeag cetetggatt cacetttage agetatgeea tgagetgggt cegeeagget 120
ccagggaagg ggctggagtg ggtctcagct attagtggta gtggtggtag cacatactac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaagattac 300
tatgatagta gtggttatca tccttttgac tactggggcc agggaaccct ggtcaccgtc 360
tcctca
                                                                    366
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<210> 262
<211> 122
<212> PRT
<213> Homo sapiens
<400> 262
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
1
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            2.0
                                25
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
                        55
                                             60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                                         75
                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
                85
Ala Lys Asp Tyr Tyr Asp Ser Ser Gly Tyr His Pro Phe Asp Tyr Trp
            100
                                105
Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115
                            120
<210> 263
<211> 321
<212> DNA
<213> Homo sapiens
<400> 263
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcgagtca gggcattagc aattatttag cctggtatca acagaaacca 120
gggaaagttc ctaagttcct gatctatgct gcatccactt tgcaatcagg ggtcccatct 180
eggtteagtg geagtggate tgggaeagat tteactetea eegteageag eetgeageet 240
gaagatgttg caacttatta ctgtcaaatg tataacagtg teccatteae ttteggeeet 300
gggaccaaag tggatatcaa a
<210> 264
<211> 107
<212> PRT
<213> Homo sapiens
<400> 264
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Phe Leu Ile
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Val Ser Ser Leu Gln Pro
Glu Asp Val Ala Thr Tyr Tyr Cys Gln Met Tyr Asn Ser Val Pro Phe
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
```

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<210> 265
<211> 157
<212> PRT
<213> homo sapiens
<400> 265
Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val
Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
                                25
Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
                                                45
                            40
Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe
                        55
Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
                    70
                                        75
Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
                                    90
                85
Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
                                105
            100
Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys
        115
                            120
                                                125
Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe
                        135
                                            140
Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
<210> 266
<211> 156
<212> PRT
<213> Mus musculus
<400> 266
Leu Arg Ser Ser Ser Gln Asn Ser Ser Asp Lys Pro Val Ala His Val
Val Ala Asn His Gln Val Glu Glu Gln Leu Glu Trp Leu Ser Gln Arg
            20
Ala Asn Ala Leu Leu Ala Asn Gly Met Asp Leu Lys Asp Asn Gln Leu
Val Val Pro Ala Asp Gly Leu Tyr Leù Val Tyr Ser Gln Val Leu Phe
Lys Gly Gln Gly Cys Pro Asp Tyr Val Leu Leu Thr His Thr Val Ser
Arg Phe Ala Ile Ser Tyr Gln Glu Lys Val Asn Leu Leu Ser Ala Val
Lys Ser Pro Cys Pro Lys Asp Thr Pro Glu Gly Ala Glu Leu Lys Pro
            100
Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly
                            120
Asp Gln Leu Ser Ala Glu Val Asn Leu Pro Lys Tyr Leu Asp Phe Ala
                        135
Glu Ser Gly Gln Val Tyr Phe Gly Val Ile Ala Leu
                    150
<210> 267
<211> 109
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<212> PRT

<213> Homo sapiens

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<400> 267
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                                         95
                                    90
Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
<210> 268
<211> 108
<212> PRT
<213> Homo sapiens
<400> 268
Glu Val Gln Leu Val Glu Ser Gly Gly Leu Ile Gln Pro Gly Gly
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
            20
                                25
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                            40
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                                         75
                    70
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                     90
                                                         95
                85
Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 269
<211> 109
<212> PRT
<213> Homo sapiens
<400> 269
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20
                                 25
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35
                             40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        5.5
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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70

75

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
<210> 270
<211> 109
<212> PRT
<213> Homo sapiens
<400> 270
Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                                    90
Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
            100
<210> 271
<211> 108
<212> PRT
<213> Homo sapiens
<400> 271
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr
            20
Tyr Trp Ser Trp Ile Arg Gln Pro Ala Gly Lys Gly Leu Glu Trp Ile
Gly Arg Ile Tyr Thr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
                        55
Ser Arg Val Thr Met Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
                                        75
                    70
Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
                                    90
Arg Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser
            100
<210> 272
<211> 110
<212> PRT
<213> Homo sapiens
<400> 272
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly
                                 25
Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
```

Page 85

```
40
Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
                        55
                                             60
Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
                                    90
Cys Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
            100
<210> 273
<211> 107
<212> PRT
<213> Homo sapiens
<400> 273
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35
                                                 45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                    70
                                         75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
                                    90
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100
<210> 274
<211> 107
<212> PRT
<213> Homo sapiens
<400> 274
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1
                                    10
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35
                                                 45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                         75
                    70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
                                     90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100
<210> 275
<211> 114
<212> PRT
<213> Homo sapiens
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<222> 101, 102
<223> Xaa = Any Amino Acid
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Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Tyr Ser
            20
                                25
Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
                            40
Pro Arg Arg Leu Ile Tyr Lys Val Trp Asn Trp Asp Ser Gly Val Pro
                        55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly
Thr His Trp Pro Xaa Xaa Leu Thr Phe Gly Gly Gly Thr Lys Val Glu
                                                     110
Ile Lys
<210> 276
<211> 111
<212> PRT
<213> Homo sapiens
<400> 276
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1
                                    10
                                                         15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
            20
                                25
                                                     30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35
                            40
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
                        55
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
                    70
                                         75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                                    90
Leu Gln Thr Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100
<210> 277
<211> 106
<212> PRT
<213> Homo sapiens
<400> 277
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1
                                    10
                                                         15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
                                                     30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35
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Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
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Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Trp Thr
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Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Lys Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<213> Homo sapiens

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
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Ala Xaa Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                                       Page 89
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<220>

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Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Arg Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
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Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
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Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
       35
                            40
                                                 45
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                        55
                                             60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
                    70
                                        75
65
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
                            40
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
                        55
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                                         75
                    70
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<213> Homo sapiens
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
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75

65

70

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
                                        75
                    70
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
            20
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Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
                            40
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
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                    70
                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                                             80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                                                         95
Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
                                             60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
                    70
                                                             80
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Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
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                85
Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
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Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
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Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
                            40
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
                        55
                                             60
Gln Gly Gln Val Thr Ile Ser Ala Asp. Lys Ser Ile Ser Thr Ala Tyr
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Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                                                         95
Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<400> 293
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg.
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
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Page 93

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20
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65
                    70
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                8.5
Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                                                         95
Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr
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Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
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                        55
Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
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                                         75
Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
                                     90
                                                         95
Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<211> 109

Page 94

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
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Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ser Tyr Ile Ser Ser Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
                    70
                                        75
Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
               85
                                    90
Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
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Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
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Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<213> Homo sapiens
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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
                                            60
                        55
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
                                        75
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<211> 109
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
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Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                    70
                                         75
                                                             80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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                                                         95
Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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                                                         15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                                                 45
Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
                        55
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
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                                         75
Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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                                                         95
Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            40
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                        75
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
                            4 O
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
                        55
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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                                         75
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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<213> Homo sapiens
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
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Ala Arg Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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<211> 111

<212> PRT

<213> Homo sapiens

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Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe

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Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
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Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
                            40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
                                        75
                    70
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
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               8.5
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
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Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                                                 45
                            40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Ile
                8.5
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
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Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
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Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
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```

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu

Page 99

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40
Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
                        55
Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
                    70
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Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
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                8.5
Ser Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
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Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
                            40
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
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Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Ile
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
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Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
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Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
    50
Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
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Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
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Ser Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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                                25
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
                                                45
                            40
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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                                        75
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Phe Pro Trp
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                                    90
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
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Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
                            40
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
                                        75
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Phe
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
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Thr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
        35
                            40
                                                 45
Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
                        55
Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
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Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
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                                    90
Asn Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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<213> Homo sapiens
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Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln
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Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala
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                                                     30
Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
        35
                            40
                                                 45
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
                        55
Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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                                         75
Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
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                                    90
Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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<211> 108
<212> PRT
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Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln
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Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys Lys Tyr Ala
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Tyr Trp Tyr Gln Gln Lys Ser Gly Gln Ala Pro Val Leu Val Ile Tyr
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Glu Asp Ser Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
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Ser Ser Gly Thr Met Ala Thr Leu Thr Ile Ser Gly Ala Gln Val Glu
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Asp Glu Ala Asp Tyr Tyr Cys Tyr Ser Thr Asp Ser Ser Gly Asn His
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Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
<210> 318
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<212> PRT
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser Asn Tyr
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Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
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Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
                        55
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
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                                        75
Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro Ile
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Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
<210> 319
<211> 108
<212> PRT
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Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln
Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala
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Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
                            40
Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
                        55
Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
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Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
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Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
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